



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/08306 A. CLASSIFICATION OF SUBJECT MATTER Int.Cl<sup>7</sup> C12N15/06, C12N5/20, C07K16/28, C12P21/08 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) C12N15/00-90, C12N1/00-7/08, C07K14/00-16/46, C12P21/00-08 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) JICST FILE (JICST-EPLUS), EUROPAT (QUESTEL), SwissProt/PIR/GeneSeq, MEDLINE(STN), PUBMED, Genbank/EMBL/DDBJ/GeneSeg, WPI(DIALOG), BIOSIS (DIALOG) DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. WO 97/22361 A1 (OTSUKA PHARM CO., LTD.), X 1-6 26 June, 1997 (26.06.97), & JP 9-227409 A & EP 870509 A1 & US 6190863 B1 Х Noriko OKADA et al., "Tosa Kogen GM2 ni Taisuru 1-6 Hito-gata IgM Kotai no Ko-HIV Kassei", Nagoya Shiritsu Daigaku Igakukai Zasshi, 1999, Vol.50, No.1/2, pages 9 to 13 Х Wu Xiaoshan et al., The IgM antibody level against 1 - 6ganglioside GM2 correlates to the disease status of HIV-1-infected patients., Microbiology and Immunology 2000, Vol.44, No.5, pages 405 to 410 Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or document defining the general state of the art which is not priority date and not in conflict with the application but cited to considered to be of particular relevance understand the principle or theory underlying the invention earlier document but published on or after the international filing document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive document which may throw doubts on priority claim(s) or which is step when the document is taken alone cited to establish the publication date of another citation or other document of particular relevance; the claimed invention cannot be special reason (as specified) considered to involve an inventive step when the document is document referring to an oral disclosure, use, exhibition or other combined with one or more other such documents, such combination being obvious to a person skilled in the art document published prior to the international filing date but later document member of the same patent family than the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 05 September, 2003 (05.09.03) . 16 September, 2003 (16.09.03) Name and mailing address of the ISA/ Authorized officer Japanese Patent Office

Telephone No.

Facsimile No.





## International application No.

PCT/JP03/08306

| Citation of document with indication where comparied and the  |   | Delement   |
|---|---|--|
|   |   | Relevant to claim No   |
| to ganglioside GM2 and complement suppres<br>propagation in ex vivo cultures of lympho<br>from HIV-1 infected patients., Microbiolo | ss virus<br>ocytes<br>ogy and   | 1-6  |
| suru IgM Kotai no Hotai Kasseikano to Ami<br>Hairetsu tono Kanrensei", Hotai Symposium  | .no-san<br>Nihon  | 1-6  |
|   |   |  |
|   |   |  |
|   | ·   |  |
|   |   |  |
|   |   |  |
| •   |   |  |
|   | ō   |  |
|   |   | ·  |
|   |   |  |
|   | -   |  |
|   | Citation of document, with indication, where appropriate, of the releve Noriko OKADA et al., Human IgM monoclonal to ganglioside GM2 and complement suppress propagation in ex vivo cultures of lymphofrom HIV-1 infected patients., Microbiolo Immunology 1999, Vol.43, No.7, pages 723  Reika ASAI et al., "HIV-1 Kansen Saibo ni suru IgM Kotai no Hotai Kasseikano to Ami Hairetsu tono Kanrensei", Hotai Symposium Seitai Bogyo Gakkai Godo Gakujutsu Shukai | Citation of document, with indication, where appropriate, of the relevant passages  Noriko OKADA et al., Human IgM monoclonal antibody to ganglioside GM2 and complement suppress virus propagation in ex vivo cultures of lymphocytes from HIV-1 infected patients., Microbiology and Immunology 1999, Vol.43, No.7, pages 723 to 727  Reika ASAI et al., "HIV-1 Kansen Saibo ni Hanno suru IgM Kotai no Hotai Kasseikano to Amino-san Hairetsu tono Kanrensei", Hotai Symposium-Nihon Seitai Bogyo Gakkai Godo Gakujutsu Shukai Koenshu, 2002, Vol.3, Nos.9 to 3, pages 35 to 35 |